In re Appln. of MIYAKE et al. Application No. Unassigned

## ABSTRACT AMENDMENTS

## Replace the Abstract with:

An electric discharge machining apparatus has improved responsive drivability and improved machining speed. A tool electrode has it's a tip end directed to toward a work piece with, a voltage being applied between the tool electrode and the work piece to generate generating a discharge. A drive shaft is connected with the tool electrode. An electrode driving device has magnetic bearings for moving the drive shaft in three directions, including a Z-axis direction that, which is an axial direction of the drive shaft, a Y-axis direction perpendicularly crossing the Z-axis direction, and an X-axis direction perpendicularly crossing the Y-axis direction and Z-axis direction, by supplying electric current to electromagnetic portions to control magnetic attractions thereof attraction. A movable coupling is connected with an end of the drive shaft and is movable in the three directions. An electric motor is connected with an end of the coupling for rotating the drive shaft through the coupling.